he was enlisted as a cooperative observer in the Weather Bureau and has never failed to render reports during this entire period. He is a jeweler.

It is of interest to note that among the nearly 5,000 cooperative observers of the Weather Bureau there are more than 300 women, 3 of whom have more than 40 years' service to their credit. These, whose photographs are presented, represent widely separated sections of the country—New England, Dixie, and the Pacific Northwest:

The dean of women observers is Miss LOUISA B. KNAPP, who is shown (fig. 4) standing beside her rain gage at Plymouth, Mass. Miss Knapp has served for 49 years.

In figure 5 is shown Miss ANNETTE KOCH, observer at Pearlington, Miss. (P. O. Logtown), who has served nearly 43 years. Miss Koch's father kept a private record of weather for many years previous to his death in the early nineties, after which she continued the observational work. She writes: "It has been my pleasure since my father's death to perform this little service to the best of my ability, and I hope to be allowed to continue as long as my work is acceptable to the Weather Bureau." Observations throughout all of these years have been made on a small farm established by her father in 1852.

In figure 6, reproduced from a small photograph, Miss ALICE B. SCUDDER, observer at Moxee, Wash., is shown. Miss Scudder began observational work for the Bureau on March 11, 1892, and has continued ever since. The equipment was obtained at the instance of her father, who was one of the first to locate in the Yakima Valley. She has been a kindergarten teacher in Yakima for 35 years, and has proven a very conscientious and faithful observer for the Weather Bureau.

Limitation of space prevents the citation in this brief summary of many other interesting records, but we cannot refrain from mentioning Mr. SAMUEL WESTERN, Deseret, Utah. Mr. Western has passed his ninety-second birthday and is probably the oldest observer in the cooperative service of the Weather Bureau. He is still active and enthusiastic about his weather work, which has been performed faithfully at practically the same location since September 1899.

WHY DO THEY DO IT?

In the hustle and bustle of our present-day busy world, when many people ask "What is there in it for me?", we may be prone to think that in the matter of assuming the obligations of a cooperative observer of the Weather Bureau, where certain exacting duties must be performed every day in the year during most of one's natural life, the inclination would be to inquire "Why should I do all this work without receiving any monetary compensation?" In other words, we may question just what it is that impels people to voluntarily make this work practically a lifetime job.

This question is eloquently answered by an esteemed and lovable member of our official family, Judge A. S. Peacock, Wakeeney, Kans., who faithfully observes the weather "way out where the West begins." The Judge recently wrote a delightful sketch entitled "Keeping Weather Records", which was published in the "Western Kansas World", from which the following is quoted:

> On this 1st day of August 1935, I am beginning my thirty-first year of continuous service as the duly appointed cooperative weather observer at Wakeeney, Kans., and among the 140 such observers in the State only 4 have served longer. Only once in all of our 30 years on the job have we failed to send in a monthly weather report to the Topeka office of Uncle Sam's Weather Bureau. Almost every week we have sent in a weekly report and for a part of the year two reports. In all the past 30 years we have not failed that many days (an average of 1 day per year) to observe and record the various data that make up the daily weather record at any given place, and that, we may be allowed to say, is some record for faithful attention to what many people would consider dull details. * * * In all the past 30 years or 360 months, for all those 1,560 weekly reports, for the making of those 10,957 daily records, we have never been paid a penny—nor expected a penny from anyone. * * *
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> Is the making of these weather records considered worth while? It would seem so; these records are frequently used in the trial of cases in various courts. It would further seem so if we may judge by the number of inquiries for weather facts. Within the past 10,957 days we have answered at least that many questions concerning the weather. And that would be a rather low average—only one question per day. If the weather be extra cold or unusually hot; drought or deluge—look out for a flood of inquiries; 15 to 40 in 1 day, occasionally. Think of the work of merely taking the phone receiver down 10,000 times! And right here our envious friend is prone to feel that any man would be foolish to work 30 years on any kind of a job without pay. He is too small and narrow to be able to conceive that any man or woman would work for mere satisfaction; their own personal satisfaction; the pleasure of their neighbors, or the benefit of generations that are yet to come and take possession of the land.
>
> Yes, it is a lot of work and daily bother, but we like it. After 30 years of the habit there is a sort of unexplainable attraction or fascination about it. Yes, we like to answer questions about the weather, though occasionally some of them are called in at very inopportune times. But let 'em come! We are here to be useful, and nothing affords us greater pleasure than to add in some small degree to the pleasure and satisfaction of others.

Mr. S. D. Flora, Weather Bureau section director for Kansas, Topeka, appends the following note: "Recently Mr. R. C. Harlan, at Walnut, has died, leaving only three cooperative observers in Kansas who have served longer than Judge Peacock. The passing of these older observers is a matter of keen regret to us."

SNOW GARLANDS ON TREE LIMBS

By W. J. HUMPHREYS
[Weather Bureau, Washington, December 1935]

In the May 1935 issue of the MONTHLY WEATHER REVIEW I published an account of a very fine snow garland, photographed by Mr. P. E. Gibson of East Grand Rapids, Mich., and gave an explanation of how this "rope of sand" hangs together. A pleasing echo of this article has just been received (Dec. 13, 1935) from Mr. Maurice Blaisdell of Goffstown, N. H., who says that on December 1, 1935, a damp snow fell that melted on the roads but clung to the trees. The next morning, snow-garlands were seen hanging on several trees, and the accompanying pictures of some of them were taken at about 12:45 p. m. of that day.

The temperature was 33° F. at 7 a. m. and 37° at noon. Also, the sky was overcast and there was no wind, and the garlands therefore remained intact all day. After dark, however, there was wind, and by the next morning, December 3, though the temperature was then down to 21°, the garlands, and most of the other snow on the trees, had fallen.

The length of the garland in figure 1 was about 12 inches between points of support, and its thickness 1½ inches. The rope of figure 2, about 1¼ inches thick, hung along a limb in several loops, as shown, like rolls of carded wool.

Well-developed snow garlands are unusual, especially those of long spans—several feet— but they do occur and well merit being hunted for when conditions for their formation are right.